

ABSTRACT

A double progressive spectacle lens is described.

The invention is distinguished in that at least one of the two progressive surfaces has at least one of the following properties:

principal line of sight

- a) the profile of the surface power along the principal line of sight in the progression channel is not monotonic between $y = -15$ mm and $y = +10$ mm,
- b) the profile of the surface astigmatism along the principal line of sight has at least two clearly expressed maxima that are at least 0.175 dpt above an adjacent minimum,
- c) the surface astigmatism A deviates in absolute terms by more than dA upward or downward from the prescription value A_R of the cylinder at approximately all points along the principal line of sight,
- d) the surface astigmatism has a global maximum on or in the vicinity of the principal line of sight between $y = \pm 20$ mm,
- e) the surface astigmatism has a local maximum on or in the vicinity of the principal line of sight between $y = \pm 20$ mm,
- f) 85% of the change in the surface power along the principal line of sight is reached on each of the surfaces on a path of less than 11 mm,
- g) the channel width at 0.75 dpt has at least two minima in the progression channel between $y = +10$ mm and $y = -18$ mm,

distance zone

- h) the surface astigmatism A deviates in the distance

zone by more than dA upward or downward from the prescription value A_R of the cylinder at approximately all points:

$$|A - A_R| \geq dA, \text{ with } dA \geq 0.18 \text{ dpt}$$

- i) the surface astigmatism A deviates in the distance zone by more than dA upward or downward from the prescription value A_R of the cylinder at at least one point:

$$|A - A_R| \geq dA, \text{ with } dA \geq 0.5 \text{ dpt}$$

near zone

- j) the surface astigmatism A deviates in the near zone by more than dA upward or downward from the prescription value A_R of the cylinder at approximately all points:

$$|A - A_R| \geq dA, \text{ with } dA \geq 0.22 \text{ dpt}$$

- k) the surface astigmatism A deviates in the near zone by more than dA upward or downward from the prescription value A_R of the cylinder at at least one point:

$$|A - A_R| \geq dA, \text{ with } dA \geq 0.4 \text{ dpt.}$$